

WHAT IS CLAIMED IS

1. An image sensing apparatus capable of optically correcting blur of an object image by an optical blur correction unit, comprising:

5 an image sensing unit for converting an optical image of an object into image signals;

a display unit for displaying image signals converted by said image sensing unit;

a display ON/OFF switch unit for switching between
10 ON/OFF states for displaying the image signals on said display unit when the image sensing apparatus is ON and in an image sensing mode; and

a control unit for changing an operational state of said optical blur correction unit depending upon the
15 switching between the ON/OFF states for displaying by said display ON/OFF switch unit.

2. The image sensing apparatus according to claim 1, wherein said control unit activates said optical blur correction unit in response to the switching to the ON state
20 by said display ON/OFF switch unit, and deactivates said optical blur correction unit in response to the switching to the OFF state by said display ON/OFF switch unit.

3. The image sensing apparatus according to claim 1 further comprising an operation unit for designating start
25 of photographing,

wherein said control unit activates said optical blur

correction unit, before said operation unit is activated, in response to the switching to the ON state by said display ON/OFF switch unit.

4. The image sensing apparatus according to claim 3,
5 wherein said control unit activates said optical blur correction unit, after said operation unit is activated, in response to the switching to the OFF state by said display ON/OFF switch unit.

5. The image sensing apparatus according to claim 1
10 further comprising an operation unit for designating start of photographing,

wherein said optical blur correction unit is activated, after said operation unit is activated, in response to the switching to the OFF state by said display
15 ON/OFF switch unit.

6. The image sensing apparatus according to claim 5,
wherein said operation unit designates preparation for photographing in response to an operation of a first stage and designates start of photographing in response to an
20 operation of a second stage.

7. The image sensing apparatus according to claim 6,
wherein said control unit activates said optical blur correction unit, in response to designation of preparation for photographing by said operation unit, in accordance
25 with the switching to the OFF state by said display ON/OFF switch unit.

8. The image sensing apparatus according to claim 1, wherein said control unit activates said optical blur correction unit, in response to designation of start of photographing by said operation unit, in accordance with
- 5 the switching to the OFF state by said display ON/OFF switch unit.
9. The image sensing apparatus according to claim 6 further comprising a photographing preparation unit for performing at least either auto-focusing processing or
- 10 photometry processing in response to designation of the preparation for photographing by said operation unit.
10. The image sensing apparatus according to claim 6 further comprising a recording unit for recording an image converted by said image sensing unit in response to
- 15 designation of start of photographing by said operation unit.
11. The image sensing apparatus according to claim 4 further comprising a blur detection unit which starts operating before said operation unit is activated in a state
- 20 where said display ON/OFF switch unit switches to the OFF state.
12. The image sensing apparatus according to claim 8 further comprising a blur detection unit which starts operating in response to designation of preparation for
- 25 photographing by said operation unit in a case where said display ON/OFF switch unit switches to the OFF state.

13. The image sensing apparatus according to claim 11,
wherein said blur detection unit comprises a vibration
gyro.

14. The image sensing apparatus according to claim 1
5 further comprising a blur correction ON/OFF switch unit for
switching between ON/OFF states of said optical blur
correction unit,

wherein said control unit changes the ON/OFF states
of said optical blur correction unit in response to the
10 switching between the ON/OFF states by said display ON/OFF
switch unit under a condition in which said blur correction
ON/OFF switch unit switches to the ON state.

15. The image sensing apparatus according to claim 1
further comprising an image sensing optical system having
15 said optical blur correction unit.

16. An image sensing apparatus capable of optically
correcting blur of an object image by an optical blur
correction unit, comprising:

an image sensing unit for converting an optical image
20 of an object into image signals;

a display unit for displaying image signals converted
by said image sensing unit; and

a control unit for controlling an operation of said
optical blur correction unit in accordance with a display
25 state of the image signals on said display unit when the
image sensing apparatus is ON and in an image sensing mode.

17. The image sensing apparatus according to claim 16, wherein said control unit operates said optical blur correction unit in a case where the image signals are displayed on said display unit, and deactivates said

5 optical blur correction unit in a case where the image signals are not displayed on said display unit.

18. The image sensing apparatus according to claim 16 further comprising an operation unit for designating start of photographing,

10 wherein said control unit activates said optical blur correction unit before said operation unit is activated in a case where the image signals are displayed on said display unit.

19. The image sensing apparatus according to claim 18, wherein said control unit activates said optical blur correction unit after said operation unit is activated in a case where the image signals are not displayed on said display unit.

20. The image sensing apparatus according to claim 16 further comprising an operation unit for designating start of an image sensing operation,

wherein said optical blur correction unit is activated after said operation unit is activated in a case where the image signals are not displayed on said display unit.

21. The image sensing apparatus according to claim 20,

wherein said operation unit designates preparation for photographing in response to an operation of a first stage and designates start of photographing in response to an operation of a second stage.

- 5 22. The image sensing apparatus according to claim 21, wherein said control unit activates said optical blur correction unit in response to designation of preparation for photographing by said operation unit in a case where the image signals are not displayed on said display unit.
- 10 23. The image sensing apparatus according to claim 21, wherein said control unit activates said optical blur correction unit in response to designation of start of photographing by said operation unit in a case where the image signals are not displayed on said display unit.
- 15 24. The image sensing apparatus according to claim 21 further comprising a photographing preparation unit for performing at least either auto-focusing processing or photometry processing in response to designation of preparation for photographing by said operation unit.
- 20 25. The image sensing apparatus according to claim 21 further comprising a recording unit for recording an image converted by said image sensing unit in response to designation of start of photographing by said operation unit.
- 25 26. The image sensing apparatus according to claim 19 further comprising a blur detection unit which starts

operating before said operation unit is activated in a case where the image signals are not displayed on said display unit.

27. The image sensing apparatus according to claim 23
5 further comprising a blur detection unit which starts operating in response to designation of preparation for photographing by said operation unit in a case where the image signals are not displayed on said display unit.

28. The image sensing apparatus according to claim 27,
10 wherein said blur detection unit comprises a vibration gyro.

29. The image sensing apparatus according to claim 16
further comprising a blur correction ON/OFF switch unit for switching between ON/OFF states of said optical blur
15 correction unit,

wherein said control unit changes the ON/OFF states of said optical blur correction unit in response to the display state of the image signals on said display unit under a condition in which said blur correction ON/OFF
20 switch unit switches to the ON state.

30. The image sensing apparatus according to claim 16 further comprising an image sensing optical system having said optical blur correction unit.

31. An image sensing apparatus capable of optically
25 correcting blur of an object image by an optical blur correction unit, comprising:

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an image sensing unit for converting an optical image of an object into image signals;

a display unit for displaying image signals converted by said image sensing unit;

5 a display ON/OFF switch unit for switching between ON/OFF states for displaying the image signals on said display unit;

an operation unit for designating start of photographing; and

10 a control unit for activating said optical blur correction unit, after said operation unit is activated, in response to the switching to the OFF state by said display ON/OFF switch unit.

32. The image sensing apparatus according to claim 31,
15 wherein said control unit activates said optical blur correction unit, in response to an operation by said operation unit, in accordance with the switching to the OFF state by said display ON/OFF switch unit.

33. The image sensing apparatus according to claim 31,
20 wherein said control unit activates said optical blur correction unit, before said operation unit is activated, in response to the switching to the ON state by said display ON/OFF switch unit.

34. The image sensing apparatus according to claim 31,
25 wherein said operation unit designates preparation for photographing in response to an operation of a first stage

and designates start of photographing in response to an operation of a second stage.

35. The image sensing apparatus according to claim 31, wherein said control unit activates said optical blur
5 correction unit in response to designation of preparation for photographing by said operation unit in accordance with the switching to the OFF state by said display ON/OFF switch unit.

36. The image sensing apparatus according to claim 31,
10 wherein said control unit activates said optical blur correction unit in response to designation of start of photographing by said operation unit in accordance with the switching to the OFF state by said display ON/OFF switch unit.

37. The image sensing apparatus according to claim 34
15 further comprising a photographing preparation unit for performing at least either auto-focusing processing or photometry processing in response to designation of the preparation for an image sensing operation by said
20 operation unit.

38. The image sensing apparatus according to claim 34 further comprising a recording unit for recording an image converted by said image sensing unit in response to
25 designation of start of photographing by said operation unit.

39. The image sensing apparatus according to claim 31

further comprising a blur detection unit which starts operating before said operation unit is activated in a state where display ON/OFF switch unit switches to the OFF state.

40. The image sensing apparatus according to claim 36
5 further comprising a blur detection unit which starts operating in response to designation of preparation for photographing by said operation unit in a case where display ON/OFF switch unit switches to the OFF state.

41. The image sensing apparatus according to claim 40,
10 wherein said blur detection unit comprises a vibration gyro.

42. The image sensing apparatus according to claim 31
further comprising a blur correction ON/OFF switch unit for switching between ON/OFF states of said optical blur
15 correction unit,

wherein said control unit activates said optical blur correction unit after said operation unit is activated in response to the switching to the OFF state by said display ON/OFF switch unit under a condition in which said blur
20 correction ON/OFF switch unit switches to the ON state.

43. The image sensing apparatus according to claim 31 further comprising an image sensing optical system having said optical blur correction unit.

44. An image sensing apparatus capable of optically
25 correcting blur of an object image by an optical blur correction unit, comprising:

an image sensing unit for converting an optical image of an object into image signals;

a display unit for displaying image signals converted by said image sensing unit;

5 an operation unit for designating start of photographing; and

a control unit for activating said optical blur correction unit after said operation unit is activated in a case where the image signals are not displayed on said display unit.

10 45. The image sensing apparatus according to claim 44, wherein said control unit activates said optical blur correction unit in response to an operation by said operation unit in a case where the image signals are not displayed on said display unit.

15 46. The image sensing apparatus according to claim 44, wherein said control unit activates said optical blur correction unit before said operation unit is activated in a case where the image signals are displayed on said display unit.

20 47. The image sensing apparatus according to claim 44, wherein said operation unit designates preparation for photographing in response to an operation of a first stage and designates start of photographing in response to an operation of a second stage.

25 48. The image sensing apparatus according to claim 47,

wherein said control unit activates said optical blur correction unit in response to designation of preparation for photographing by said operation unit in a case where the image signals are not displayed on said display unit.

- 5 49. The image sensing apparatus according to claim 47, wherein said control unit activates said optical blur correction unit in response to designation of start of photographing by said operation unit in a case where the image signals are not displayed on said display unit.
- 10 50. The image sensing apparatus according to claim 47 further comprising an image sensing preparation unit for performing at least either auto-focusing processing or photometry processing in response to designation of preparation for photographing by said operation unit.
- 15 51. The image sensing apparatus according to claim 47 further comprising a recording unit for recording an image converted by said image sensing unit in response to designation of start of photographing by said operation unit.
- 20 52. The image sensing apparatus according to claim 44 further comprising a blur detection unit which starts operating before said operation unit is activated in a case where the image signals are not displayed on said display unit.
- 25 53. The image sensing apparatus according to claim 49 further comprising a blur detection unit which starts

operating in response to designation of preparation for photographing by said operation unit in a case where the image signals are not displayed on said display unit.

54. The image sensing apparatus according to claim 49,
5 wherein said blur detection unit comprises a vibration gyro.

55. The image sensing apparatus according to claim 44 further comprising a blur correction ON/OFF switch unit for switching between ON/OFF states of said optical blur
10 correction unit,

wherein said control unit controls the ON/OFF states of said optical blur correction unit in response to the display state of the image signals on said display unit under a condition in which said blur correction ON/OFF
15 switch unit switches to the ON state.

56. The image sensing apparatus according to claim 44 further comprising an image sensing optical system having said optical blur correction unit.

57. A control method for controlling an image sensing
20 apparatus capable of optically correcting blur of an object image by an optical blur correction unit, said control method comprising:

an operational state of said optical blur correction unit is changed depending upon switching between ON/OFF
25 states for displaying image signals from an image sensing unit which is for converting an optical image of an object

into image signals, when the image sensing apparatus is ON and in an image sensing mode.

58. The control method according to claim 57, wherein said optical blur correction unit is activated in response to the switching to the ON state for displaying, and said optical blur correction unit is deactivated in response to the switching to the OFF state for displaying.

59. A control method for controlling an image sensing apparatus capable of optically correcting blur of an object image by an optical blur correction unit, said control method comprising:

an operational state of said optical blur correction unit is controlled depending upon a display state of displaying image signals from an image sensing unit which is for converting an optical image of an object into image signals, when the image sensing apparatus is ON and in an image sensing mode.

60. The control method according to claim 59, wherein said optical blur correction unit is activated in a case where the image signals are displayed, and said optical blur correction unit is deactivated in a case where the image signals are not displayed.

61. A control method for controlling an image sensing apparatus capable of optically correcting blur of an object image by an optical blur correction unit, said control method comprising:

said optical blur correction unit is activated in response to switching to an OFF state for displaying image signals from an image sensing unit which is for converting an optical image of an object into image signals after an operation unit for designating start of photographing is activated.

62. The control method according to claim 61, wherein said optical blur correction unit is activated, before said operation unit is activated, in response to switching to the ON state for displaying.

63. A control method for controlling an image sensing apparatus capable of optically correcting blur of an object image by an optical blur correction unit, said control method comprising:

15 said optical blur correction unit is activated after an operation unit for designating start of photographing is activated in a case where image signals from an image sensing unit which is for converting an optical image of an object into image signals are not displayed.

20 64. The control method according to claim 63, wherein said optical blur correction unit is activated before said operation unit is activated in a case where the image signals are displayed.

25 65. A computer program product comprising a computer usable medium having computer readable program code means embodied in said medium for an image sensing apparatus

capable of optically correcting blur of an object image by an optical blur correction unit, said product including:

5 a module for changing an operational state of said optical blur correction unit depending upon switching between ON/OFF states for displaying image signals from an image sensing unit which is for converting an optical image of an object into image signals, when the image sensing apparatus is ON and in an image sensing mode.

66. The computer program product according to claim 65
10 further comprising a module for activating said optical blur correction unit in response to the switching to the ON state for displaying, and deactivating said optical blur correction unit in response to the switching to the OFF state for displaying.

15 67. A computer program product comprising a computer usable medium having computer readable program code means embodied in said medium for an image sensing apparatus capable of optically correcting blur of an object image by an optical blur correction unit, said product including:

20 a module for controlling an operational state of said optical blur correction unit depending upon a display state of displaying image signals from an image sensing unit which is for converting an optical image of an object into image signals when the image sensing apparatus is ON and in an
25 image sensing mode.

68. The computer program product according to claim 67

further comprising a module for activating said optical blur correction unit in a case where the image signals are displayed, and deactivating said optical blur correction unit in a case where the image signals are not displayed.

5 69. A computer program product comprising a computer usable medium having computer readable program code means embodied in said medium for an image sensing apparatus capable of optically correcting blur of an object image by an optical blur correction unit, said product including:

10 a module for activating said optical blur correction unit in response to switching to an OFF state for displaying image signals from an image sensing unit which is for converting an optical image of an object into image signals after an operation unit for designating start of
15 photographing is activated.

70. The computer program product according to claim 69 further comprising a module for activating said optical blur correction unit before said operation unit is activated in response to switching to the ON state for
20 displaying.

71. A computer program product comprising a computer usable medium having computer readable program code means embodied in said medium for an image sensing apparatus capable of optically correcting blur of an object image by
25 an optical blur correction unit, said product including:
a module for activating said optical blur correction

unit after an operation unit for designating start of
photographing is activated in a case where image signals
from an image sensing unit which is for converting an
optical image of an object into image signals are not
5 displayed.

72. The computer program product according to claim 71
further comprising a module for activating said optical
blur correction unit before said operation unit is
activated in a case where the image signals are displayed.

10 73. An image sensing apparatus to which a blur correction
unit for correcting blur in an object image is applied,
comprising:

an operation unit for designating start of
photographing;

15 a determination unit for determining a battery level
of a power supply battery for supplying power to said blur
correction unit; and

a control unit for allowing said blur correction unit
to operate after said operation unit is activated in a case
20 where a determination result by said determination unit
indicates that the battery level is less than a
predetermined level.

74. The image sensing apparatus according to claim 73,
wherein said blur correction unit is an optical blur
25 correction unit for optically correcting blur in the object
image.

75. The image sensing apparatus according to claim 73 further comprising a blur detection unit which starts operating before said operation unit is activated even in a case where the determination result by said determination unit indicates that the battery level is less than the predetermined level,

wherein said blur correction unit operates on the basis of a detection result by said blur detection unit.

76. The image sensing apparatus according to claim 73 further comprising a blur detection unit which starts operating after said operation unit is activated in a case where the determination result by said determination unit indicates that the battery level is less than the predetermined level,

wherein said blur correction unit operates on the basis of a detection result by said blur detection unit.

77. The image sensing apparatus according to claim 76, wherein, in a case where the determination result by said determination unit indicates that the battery level is less than the predetermined level, said blur detection unit starts operating in response to an operation of a first stage of said operation unit and said blur correction unit starts operating in response to an operation of a second stage of said operation unit.

78. The image sensing apparatus according to claim 73 further comprising a blur detection unit which starts

operating before said operation unit is activated in a case where a determination result by said determination unit indicates that the battery level is less than the predetermined level and not less than a second
5 predetermined level, and starts operating after said operation unit is activated in a case where the battery level is determined less than the second predetermined level,

wherein said blur correction unit operates on the
10 basis of the detection result by said blur detection unit.
79. The image sensing apparatus according to claim 73 further comprising a display unit for displaying the object image,

wherein said control unit allows said blur correction
15 unit to operates after said operation unit is activated even in a case where the determination result by said determination unit indicates that the battery level is not less than the predetermined level if said display unit does not display the object image.

80. The image sensing apparatus according to claim 73,
wherein said control unit allows said blur correction unit to operate before said operation unit is activated in a case where the determination result by said determination unit indicates that the battery level is not less than the
25 predetermined level.

81. The image sensing apparatus according to claim 73,

wherein said operation unit designates preparation for photographing in response to an operation of a first stage, and designates start of photographing in response to an operation of a second stage.

- 5 82. The image sensing apparatus according to claim 81, wherein said operation unit designates at least either auto-focusing processing or photometry processing.

83. The image sensing apparatus according to claim 73 further comprising a notification unit for notifying an
10 operation state of said blur correction unit in response to the determination result by said determination unit.

84. The image sensing apparatus according to claim 73 further comprising an image sensing unit for converting an optical image of an object to image signals and providing
15 the image signals to said display unit.

85. The image sensing apparatus according to claim 73 further comprising an image sensing optical system for forming the optical image of the object.

86. A control method for controlling an image sensing
20 apparatus to which a blur correction unit for correcting blur in an object image is applied, said control method comprising:

- a battery level of a power supply battery for supplying power to said blur correction unit is determined,
25 and said blur correction unit is allowed to operate after an operation unit for designating start of photographing

is activated in a case where the battery level is less than a predetermined level.

87. A computer program product comprising a computer usable medium having computer readable program code means embodied in said medium for an image sensing apparatus to which a blur correction unit for correcting blur in an object image is applied, said product including:

a module for detecting a battery level of a power supply battery for supplying power to said blur correction unit, and allowing said blur correction unit to operate after an operation unit for designating start of photographing is activated in a case where the battery level is less than a predetermined level.